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10/623,137	07/18/2003	Jeffrey A. Wilmer	K0476-700710	5203

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EXAMINER

SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,137

Applicant(s)

WILMER ET AL.

Examiner

Tony G. Soohoo

Art Unit

1723

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) 13-15 and 20-22 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 and 16-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 211-9-05.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 1723

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 13-15, and claims 20-22 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:
The newly amended claims 13-15 and 20-22 present a new invention with a different and independently distinct means for analyzing and controlling the mixture dependent upon periods of time which was not previously presented and may have been restricted if originally presented.
2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-15 and 20-22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03., and 819.

MPEP 819 [R-3] Office Generally Does Not Permit Shift

The general policy of the Office is not to permit the applicant to shift to claiming another invention after an election is once made and action given on the elected subject matter. Note that the applicant cannot, as a matter of right, file a request for continued examination (RCE) to obtain continued examination on the basis of claims that are independent and distinct from the claims previously claimed and examined (i.e., applicant cannot switch inventions by way of an RCE as a matter of right). When claims are presented which the examiner holds are drawn to an invention other than the one elected, he or she should treat the claims as outlined in MPEP § 821.03.

Where a continued prosecution application (CPA) filed under 37 CFR 1.53(d)* is a continuation of its parent application and not a divisional, ** an express election made in the prior (parent) application in reply to a restriction requirement carries over to the CPA ** unless otherwise indicated by applicant. In no other type of continuing application * >does< an election carry over from the prior application. >See Bristol-Myers Squibb Co. v. Pharmachemie BV, 361 F.3d 1343, 1348, 70 USPQ2d 1097, 1100 (Fed. Cir. 2004)(An original restriction requirement in an earlier filed application does not carry over to claims of a continuation application in which the examiner does not reinstate or refer to the restriction requirement in the parent application.).

Where a genus claim is allowable, applicant may prosecute a reasonable number of additional species claims thereunder, in accordance with 37 CFR 1.141.

Where an interference is instituted prior to an applicant's election, the subject matter of the interference issues is not elected. An applicant may, after the termination of the interference, elect any one of the inventions claimed.<

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 16-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure fails to provide a written description and antecedent basis usage of the terms first control signal, second control signal, third control signal, a fourth control signal, a 1st predetermined time period, second predetermined time period, a fifth control signal, and a first concentration and second concentration, a third desired concentration, a "specification mixture".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-12, and 18 -19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hathorn et al 3161203 in view of Wilmer et al 2002/0048213.

The reference to Hathorn (et al) teaches a controller feed system and mixing tank 3 having feed source lines 4 5 with a respective valve 16, 21 which is controlled by a controller 14. The controller 14 is further reactive to a sensor 13 located in a recirculation line 17 having an inlet line 6a, and an outlet line 17 feeding back into the mixing tank 3 with a pump 9 and an outlet line 6c located between the pump and the recirculation line 17 outlet to the tank.

With regards to claims 18-19, it is noted that the signal provided by the controller may be divided in any sequential number of discrete time periods, any number of readings of state of concentration, any number of corresponding signals. Also note that in the operation of the device and method as proposed, the flow of material would be interrupted once the proper concentration as the concentration fluctuates near the desired concentration of the specification of the mixture.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6; and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hathorn et al 3161203 in view of Wilmer et al 2002/0048213.

The reference to Hathorn (et al) teaches a controller feed system and mixing tank 3 having feed source lines 4 5 with a respective valve 16, 21 which is controlled by a controller 14. The controller 14 is further reactive to a sensor 13 located in a recirculation line 17 having an inlet line 6a, and an outlet line 17 feeding back into the mixing tank 3 with a pump 9 and an outlet line 6c located between the pump and the recirculation line 17 outlet to the tank.

The Hathorn reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of having a mixture drain port and a controller which may respond to dispense part of the mixture should the sensor control signal detects that the material in the mixture is greater than the desired concentration.

The reference to Wilmer et al 2002/0048213 teaches on paragraph [0080] that in a mixing device or holding vessel, a drain or a disposal system may be utilized to dispose any unacceptable or unneeded blend of material during the blend process. Accordingly in view of the teaching by the Wilmer reference, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the device and method of Hathorn with a drain so that in any time the material mixture concentration is unacceptable such as being greater in concentration, one may easily dispense the unwanted and unacceptable mixture.

With regards to claims 16-17, it is noted that the signal provided by the controller may be divided in any sequential number of discrete time periods, any number of readings of state of concentration, any number of corresponding signals. Also note that in the operation of the device and method as proposed, the flow of material would be

interrupted once the proper concentration as the concentration fluctuates near the desired concentration of the specification of the mixture.

8. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conoby et al 5516423 in view of Hathorn et al 3161203

9. Conoby, embodiment shown in figure 2, discloses a blend chamber 12 with 1st inlet and 2nd inlet for respective lines 39, 43, with connective respective metering pumps 46, 40, column 5 lines 47-52 and also suggests simple on/off control schemes for reagent feed may be used. The Conoby reference also teaches a recirculation line 70, 73 with recirculation pump 72 for recirculation of fluid back into the tank chamber 12, column 7, lines 62-68 through column 8 line 1, and a pH sensor 22 in the tank which may indicate conductivity to sense the mixture to send a signal output 23 a controller 30 to activate the feed of at least comprising the 2nd material to achieve a desired pH which is an indicator of the amount of concentration of the second material in the mixture, col. 5, line 23-27, and column 5 line 51-67.

The Conoby reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of the 1st and 2nd lines having a valve in contrast to a metering pump, and the sensor 22 being located in the recirculation line to sense the mixture in contrast to the tank itself and having a mixture drain port and a controller which may respond to dispense part of the mixture should the sensor control signal detects that the material in the mixture is greater than the desired concentration.

The reference to Hathorn (et al) teaches a controller feed system and mixing tank 3 having feed source lines 4 5 with a respective valve 16, 21 which is controlled by a controller 14. The controller 14 is further reactive to a sensor 13 located in a recirculation line 17 having an inlet line 6a, and an outlet line 17 feeding back into the mixing tank 3 with a pump 9 and an outlet line 6c located between the pump and the recirculation line 17 outlet to the tank.

In view of the showing of the state of the art by the Hathorn reference, a person having ordinary skill in the art in reviewing the showing by the Hathorn reference that one may monitor the condition of the mixture in the recirculation line, and that utilize valve controls as means to feed material flow into the mixing tank, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute for the metering valves of the Conoby reference with an valve as shown by Hathorn, and further modify the pH sensor location to the recirculation line as shown by Hathorn so that the metering of material and measurement of the pH which is dispensed is performed more accurately.

10. Claims 1-6, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conoby et al 5516423 in view of Hathorn et al 3161203 as applied to claim 7 above, and further in view of Wilmer et al 2002/0048213..

The Conoby reference, as modified above discloses all of the recited subject matter as defined within the scope of the claims with the exception of the structure having the feature of a mixture drain port and a controller which may respond to

Art Unit: 1723

dispense part of the mixture should the sensor control signal detects that the material in the mixture is greater than the desired concentration.

The reference to Wilmer et al 2002/0048213 teaches on paragraph [0080] that in a mixing device or holding vessel, a drain or a disposal system may be utilized to dispose any unacceptable or unneeded blend of material during the blend process. Accordingly in view of the teaching by the Wilmer reference, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the device and method of Conoby with a drain so that in any time the material mixture concentration is unacceptable such as being greater in concentration, one may easily dispense the unwanted and unacceptable mixture.

With regards to claims 16-20, it is noted that the signal provided by the controller may be divided in any sequential number of discrete time periods, any number of readings of state of concentration, any number of corresponding signals. Also note that in the operation of the device and method as proposed, the flow of material would be interrupted once the proper concentration as the concentration fluctuates near the desired concentration of the specification of the mixture

11. Claims 1-12, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilmer et al 6923568 in view of Hathorn et al 3161203.

12. or alternately, Claims 1-12, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilmer et al US 2002/0048213 in view of Hathorn et al 3161203.

Wilmer et al 6923568 or alternately US 2002/0048213 of the same family, discloses a blend chamber 22 with 1st inlet and 2nd inlet for respective lines 18, 18, with connective respective valves for respective feed. The Wilmer et al 6923568 a flow characteristic sensor 96 from the mixing tank 22 which may indicate flow characteristic, figure 10, to sense the mixture to send a signal output a controller 91 to activate the feed of material by the valve 21, column 13, lines 54-63.

The reference to Wilmer et al 2002/0048213 teaches on paragraph [0080] or alternately the US patent 6923568 teaches that in a mixing device or holding vessel, a drain or a disposal system may be utilized to dispose any unacceptable or unneeded blend of material during the blend process. Accordingly in view of the teaching by the Wilmer reference, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the device and method of Hathorn with a drain so that in any time the material mixture concentration is unacceptable such as being greater in concentration, one may easily dispense the unwanted and unacceptable mixture.

The Wilmer et al 6923568 or alternately US 2002/0048213 reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of the sensor being located in a recirculation line connected to the mixer 22 tank itself

The reference to Hathorn (et al) teaches a controller feed system and mixing tank 3 having feed source lines 4 5 with a respective valve 16, 21 which is controlled by a controller 14. The controller 14 is further reactive to a sensor 13 located in a recirculation line 17 having an inlet line 6a, and an outlet line 17 feeding back into the

mixing tank 3 with a pump 9 and an outlet line 6c located between the pump and the recirculation line 17 outlet to the tank.

In view of the showing of the state of the art by the Hathorn reference, a person having ordinary skill in the art in reviewing the showing by the Hathorn reference that one may monitor the condition of the mixture in a recirculation line, it is deemed that it would have been obvious to one of ordinary skill in the art to relocate the sensor and provide a recirculation line with the sensor relocated at the recirculation line of the mixing tank as shown by Hathorn so that the metering of material and measurement of the mixture characteristic is performed more accurately.

With regards to sensing and using a conductivity sensor, the Wilmer reference teaches column 14, line 55-56 (in the U.S. patent) that the sensor is a sensor to sense the blended process material is acceptable. Whereby a conductivity of a mixture is an known manner to evaluate a mixture, it is deemed that it would have been obvious to one of ordinary skill in the art to without undue experimentation to utilize a conductivity sensor in order to more accurately measure the material mixture conductivity of a respective intended use in pH sensitive mixtures.

With regards to claims 16-20, it is noted that the signal provided by the controller may be divided in any sequential number of discrete time periods, any number of readings of state of concentration, any number of corresponding signals. Also note that in the operation of the device and method as proposed, the flow of material would be interrupted once the proper concentration as the concentration fluctuates near the desired concentration of the specification of the mixture.

Response to Arguments

13. Applicant's arguments with respect to claims 1-12, 16-19, apparatus claims, have been considered but are moot in view of the new ground(s) of rejection.

With regards to the method claims, applicant has argue upon page 12, that the Hathorn reference does not disclose providing a step of providing a 1st material in bulk to a blend chamber. Applicant is referred to the introduction of the solid bulk material from a bulk reservoir 2 into the mixing chamber 3.

Also applicant agues that the Conoby or Hathorn reference on page 13 of the remarks that a person having ordinary skill in the art would not substitute the metering pumps of Conoby with the valves of Hathorn. It is noted that the is cited as a teaching of he state of the art of monitoring a mixture and as a showing of the use of valves as a known structural functional equivalent element. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case with the use of the valve, since whereas it has been held that it is obvious within the skill of a person having ordinary skill in the art to substitute known equivalents for the same purpose, it is deem that it is deemed that it would have been obvious to one of ordinary skill in the art to substitute the valves of the Conoby

Art Unit: 1723

reference with a known structural or functional equivalent for the same purpose of

Hathorn. In this case, a valve and controller for controlling the flow of fluids.

MPEP 2144.06 Art Recognized Equivalence for the Same Purpose

COMBINING EQUIVALENTS KNOWN FOR THE SAME PURPOSE

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). But see In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987) ("Based upon the prior art and the fact that each of the three components of the composition used in the claimed method is conventionally employed in the art for treating cooling water systems, the board held that it would have been prima facie obvious, within the meaning of 35 U.S.C. 103, to employ these components in combination for their known functions and to optimize the amount of each additive.... Appellant argues... hindsight reconstruction or at best,... obvious to try'.... We agree with appellant.").

SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE

In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents. In re Ruff, 256 F.2d 590, 118 USPQ 340 (CCPA 1958) (The mere fact that components are claimed as members of a Markush group cannot be relied upon to establish the equivalency of these components. However, an applicant's expressed recognition of an art-recognized or obvious equivalent may be used to refute an argument that such equivalency does not exist.); In re Scott, 323 F.2d 1016, 139 USPQ 297 (CCPA 1963) (Claims were drawn to a hollow fiberglass shaft for archery and a process for the production thereof where the shaft differed from the prior art in the use of a paper tube as the core of the shaft as compared with the light wood or hardened foamed resin core of the prior art. The Board found the claimed invention would have been obvious, reasoning that the prior art foam core is the functional and mechanical equivalent of the claimed paper core. The court reversed, holding that components which are functionally or mechanically equivalent are not necessarily obvious in view of one another, and in this case, the use of a light wood or hardened foam resin core does not fairly suggest the use of a paper core.); Smith v. Hayashi, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (The mere fact that phthalocyanine and selenium function as equivalent photoconductors in the claimed environment was not sufficient to establish that one would have been obvious over the other. However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents

Art Unit: 1723

strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.).

An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). But see In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987) ("Based upon the prior art and the fact that each of the three components of the composition used in the claimed method is conventionally employed in the art for treating cooling water systems, the board held that it would have been prima facie obvious, within the meaning of 35 U.S.C. 103, to employ these components in combination for their known functions and to optimize the amount of each additive....Appellant argues... hindsight reconstruction or at best,... obvious to try'.... We agree with appellant."). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

Applicant also argues that there is no motivation to combine the Wilmer reference with the Hathorn reference on page 14 of the remarks. Motivation to combine the reference of Wilmer and Hathorn has been pointed out above in section 11 and 12. Applicants' argument to a difference in the dispensing of material from the static mixer (mixing chamber) in contrast to a batch system, has been considered and is unpersuasive whereby such features has not been claimed or required in the scope of the language of the claims.

Conclusion

14. The prior art made of record PREVIOUSLY MADE OF RECORD and not relied upon is considered pertinent to applicant's disclosure. Suzuki et al 5800056 is pointed

Art Unit: 1723

out as another example of the state of art made of record whereby it is known to use a drain port V13 from a mixing chamber in addition to an outlet V12.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant has amended the apparatus claims to include a drain port, a controller connected to the drain port and the particular operation of the controller control signals. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

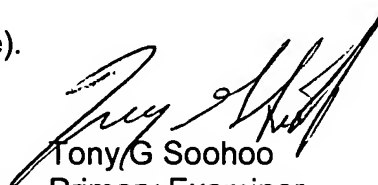
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7-5PM, Tue-Fri.

Art Unit: 1723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tony G Soohoo
Primary Examiner
Art Unit 1723
